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10/765,001	01/26/2004	Carl Churchill	BIODOT.028C1	6765

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EXAMINER	
ALEXANDER, LYLE	
ART UNIT	**PAPER NUMBER**
1743	

NOTIFICATION DATE	DELIVERY MODE
09/27/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/765,001	CHURCHILL ET AL.	
	Examiner	Art Unit	
	Lyle A. Alexander	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 25-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 25-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/23/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 and 25-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are vague and indefinite how the text files are created and to their contents. Further, the claims are not clear what is intended by the claimed "software program". What is this software program and what are the details that would enable one having ordinary skill in the art to make and use the claimed "software program".

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 and 25-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification teaches in paragraphs [0101+] host CPU(402) and a controller card. It is not clear what is intended by the "controller card" and how one having ordinary skill in the art could make and use such a card.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-10 and 25-38 are rejected under 35 U.S.C. 102(b,) as being clearly anticipated by Tisone(524', 522', 960', 554', 728'), Deeg et al.(5,338,688), Hayes et al.(USP 5,658,802) or Brown et al.(USP 5,807,522).

In light of the above 35 USC 112 1st and 2nd paragraph issues, it is not clear how the specific program steps are accomplished. For the purposes of examination, the invention is best understood as a method of dispensing using a preprogrammed pattern.

See the appropriate paragraph of the 4/24/07 Office action.

Claims 1-10 and 25-38 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Deeg et al.(5,338,688).

In light of the above 35 USC 112 1st and 2nd paragraph issues, it is not clear how the specific program steps are accomplished. For the purposes of examination, the invention is best understood as a method of dispensing using a preprogrammed pattern.

See the appropriate paragraph of the 4/24/07 Office action.

Claims 1-10 and 25-38 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Tisone(295').

In light of the above 35 USC 112 1st and 2nd paragraph issues, it is not clear how the specific program steps are accomplished. For the purposes of examination, the invention is best understood as a method of dispensing using a preprogrammed pattern.

See the appropriate paragraph of the 4/24/07 Office action.

Claims 1-10 and 25-38 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Tisone(2002/0001657).

In light of the above 35 USC 112 1st and 2nd paragraph issues, it is not clear how the specific program steps are accomplished. For the purposes of examination, the invention is best understood as a method of dispensing using a preprogrammed pattern.

See the appropriate paragraph of the 4/24/07 Office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10 and 25-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tisone(524', 522', 960', 554', 728'), Deeg et al.(5,338,688), Hayes et al.(USP 5,658,802), Brown et al.(USP 5,807,522), Deeg et al.(5,338,688), Tisone(295') or Tisone(2002/0001657) .

See the appropriate paragraph of the 4/24/07 Office action.

The cited prior art all teach method of precisely dispensing small quantities of liquid in predetermined patterns. In light of the above 35 USC 112 1st and 2nd paragraph issues, it is not clear how the specific program steps are accomplished. For the purposes of examination, the invention is best understood as a method of dispensing using a preprogrammed pattern. For the sake of argument, the Office notes paragraph [0168] of the specification teaches the software used for the instant invention is commercially available as "Axsys" from "Cartesian Technologies" which is not taught by the cited prior art.

The Office maintains it would have been within the skill of the art to use an "off the shelf" program package to control the cited prior art. Off the shelf program packages are desirable because they are created by professional programmer who make the software more user friendly and provide customer support.

It would have been within the skill of the art to modify Tisone(524', 522', 960', 554', 728'), Deeg et al.(5,338,688), Hayes et al.(USP 5,658,802), Brown et al.(USP

5,807,522), Deeg et al.(5,338,688), Tisone(295') or Tisone(2002/0001657) and use an "off the shelf program", such as "Axsys" from "Cartesian Technologies" to gain the above advantages.

Response to Arguments

Applicant's arguments filed 7/23/07 have been fully considered but they are not persuasive.

Applicants' argue the cited prior art fails to teach the claimed data manipulation steps used by the software. These specific steps are not completely understood in light of the above 35 USC 112 1st and 2nd paragraph issues. Even if the 35 USC 112 issues were clarified, the Office notes Applicants teach in paragraph[0168] the claimed software is a commercially available program "Axsys" from "Cartesian Technologies". The Office maintains in the above 35 USC 103 rejections that it is within the skill of the art to use an "off the shelf program" such as "Axsys" from "Cartesian Technologies".

The Office notes the 7/23/07 IDS has been considered and appreciate Applicants' submission of the non-USP documents. These documents have been considered as generally teaching teach method of precisely dispensing small quantities of liquid in predetermined patterns. These references have not been applied because they teach similar concepts as the cited prior art and would only be duplicative.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A. Alexander whose telephone number is 571-272-1254. The examiner can normally be reached on Monday, Wednesday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lyle A Alexander
Primary Examiner
Art Unit 1743